Pre-Lab Questions: Yeast Respiration & Fermentation

1. What is cellular respiration?

2. What are the two stages of cellular respiration?

3. What is fermentation?

4. What is ATP? Why is ATP important?

5. How do the products differ between respiration and fermentation?

6. In which situation is air present -during respiration or fermentation?

7. How many stages are there in fermentation? Which stage that is present in cellular respiration is not present in fermentation?

8. In which process, respiration or fermentation, are carbohydrates not completely broken down? How does this affect the amount of ATP released?

9. Why is fermentation important for yeast?
10. What is gas chromatography used for?

11. What does "elute" mean? What might affect elution rates?

12. How can we use gas chromatography to identify substances found in a mixture?

13. What is the purpose of this lab?

14. What is the difference between cultures A, B, C? (We will discuss this.)

15. What temperature should be maintained in order to get the best results?

16. How are you going to maintain the temperature? (We will discuss.)

17. What should be done when the water reaches a temperature of 70°C? Why?

18. Why is it important not to let water drip from the paper towel in the collection vial?

19. What is distillate?